

Amendments to the Claims

1. (Canceled)
- 2.-5. (Canceled)
6. (Original) A method of preparing a dielectric gate material to reduce current leakage from a silicon substrate to a polysilicon gate, prevent boron penetration in a p-channel device, and reduce electron trapping in the dielectric, comprising saturating the surface of a silicon wafer with hydroxyl groups, heating a calcium halide to a temperature at which the vapor pressure of said calcium halide is sufficient to achieve atomic layer deposition, transporting said calcium halide to said silicon wafer, and transporting gaseous water to said silicon wafer.
7. (Original) A method according to claim 6, wherein said calcium halide is calcium bromide.
8. (Original) A method according to claim 6, further comprising repeating the steps of transporting said calcium halide to said silicon wafer and transporting gaseous water to said silicon wafer, until a desired thickness of the dielectric gate material has been achieved.
9. (Original) A method according to claim 8, wherein said calcium halide is calcium bromide.

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10. (New). A dielectric gate material to reduce current leakage from the silicon substrate to the polysilicon gate, prevent boron penetration in p-channel devices, and reduce electron trapping in the dielectric, manufactured by the steps of:
saturating the surface of a silicon wafer with hydroxyl groups,
heating a calcium halide to a temperature at which the vapor pressure of said calcium halide is sufficient to achieve atomic layer deposition,
transporting said calcium halide to said silicon wafer, and
transporting gaseous water to said silicon wafer.
11. (New) The dielectric gate material of claim 10, wherein said calcium halide is calcium bromide.
12. (New) The dielectric gate material of claim 10, further comprising repeating the steps of transporting said calcium halide to said silicon wafer and transporting gaseous water to said silicon wafer, until a desired thickness of the dielectric gate material has been achieved.
13. (New) The dielectric gate material of claim 12, wherein said calcium halide is calcium bromide.

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